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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,883	10/29/2001	Phillip A. Danner	120751	1812
23465	7590	09/05/2006	EXAMINER	
JOHN S. BEULICK C/O ARMSTRONG TEASDALE, LLP ONE METROPOLITAN SQUARE SUITE 2600 ST LOUIS, MO 63102-2740			JONES, PRENELL P	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 09/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/682,883

Applicant(s)

DANNER ET AL.

Examiner

Prenell P. Jones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 11 is/are allowed.
- 6) ☒ Claim(s) 1-4, 7, 12, 14 and 17 is/are rejected.
- 7) ☐ Claim(s) 5, 6, 8-10, 13, 15, 16 and 18-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Response to Arguments

1. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 3, 4, 7, 12, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elliott et al (US PG PUB 2002/0064149) in view of Woram (US Pat. 6,728,262) (Non-patent literature, PC EXPO 99, (Non-patent literature) and IEEE Standard

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Definition, Specification and Analysis of Systems Used for Supervisory Control, Data Acquisition, and Automatic Control (IEEE Specification).

Regarding claims 1, 4, 7, 12 and 17, Elliott discloses providing quality service in a hybrid communication network that includes Ethernet switching and a plurality of ports, which supports industrial and military environment (paragraph 0409, 1186, 1675 & 1737). But, Elliott is silent on an Ethernet switch operating in a temperature range between 0 degrees Celsius and approximately 60 degrees Celsius, an operating humidity at least between 10% and approximately 95%. However, in an Ethernet communication system, Woram discloses a communication system that utilizes management of process control data, wherein the architecture includes providing industrial users options for securing a network with process control management, utilizing Ethernet networks, which include Ethernet/hub switches and LANs operable in an industrial environment that supports network transfer protocols, such as RMON (Figs. 1-5, Abstract, col. 4, line 14-67, col. 7, line 16-67, col. 8, line 50-67, col. 9, line 11-28, col. 13, line 47-67), PC EXPO 99 discloses an industrial computer that is suited for a ruggedized environment, wherein the operating temperature is 0 to 60 degrees Celsius (page 10, second paragraph), and IEEE Specification discloses utilizing operating humidity at a range of 10% to 95% without condensation for communication hardware as it is associated with extreme, outdoors and unusual environments. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement an Industrial Ethernet switch with a plurality of ports in a non-office environment with operable temperature between 0 to 60 degrees Celsius and operable humidity between 10% to 95% as taught by the combined teachings of Woram, PC EXPO 99 and IEEE Specification with the teachings of

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Elliott for the purpose of further provide industrial users management process control options.

Regarding claim 3 and 14, as indicated above, Elliott discloses providing quality service in a hybrid communication network that includes Ethernet switching and a plurality of ports, which supports industrial and military environment (paragraph 0409, 1186, 1675 & 1737). Elliott further discloses an that the Ethernet switch operate in conjunction with a plurality of ports accommodate speeds of at least a gigabit (paragraph 3428, 3429).

2. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Elliott et al (US PG PUB 2002/0064149) in view of Woram (US Pat. 6,728,262) (Non-patent literature, PC EXPO 99, (Non-patent literature) and IEEE Standard Definition, Specification and Analysis of Systems Used for Supervisory Control, Data Acquisition, and Automatic Control (IEEE Specification) as applied to claims 1, 3, 4, 7, 12, 14 and 17 above, and further in view of 3COM SuperStack II Switch 9300 (Non-Patent Literature).

Regarding claim 2, as indicated above, Elliott et al (US PG PUB 2002/0064149), Woram, PC EXPO 99, and IEEE Specification combined discloses in an industrial Ethernet environment managing networks and process control. However, Elliott et al (US PG PUB 2002/0064149), Woram, PC EXPO 99, and IEEE Specification are silent on stackable Ethernet switches. In the architecture of an Ethernet switch, 3COM SuperStack II Switch 9300 (Gigabit Ethernet switch) discloses a switch system that provides support for stackable switches (Chapter 2, page 20). Therefore, it would have been obvious to one of

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ordinary skill in the art at the time of the invention to be motivated to implement stackable switches as taught by 3COM SuperStack II Switch 9300 with combined teachings of Elliott et al (US PG PUB 2002/0064149), Woram, PC EXPO 99, and IEEE Specification for the purpose of managing utilization of operational area.

Allowable Subject Matter

4. Claim 11 is allowed over prior art.

7. Claims 5, 6, 8-10, 13, 15, 16 and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Although the cited prior art discloses a networking system that implements inter-networking and whose architecture includes a switching network wherein the Ethernet switch has a plurality of ports and coupled to a plurality of hubs or concentrators which are coupled to end-stations, Ethernet switch accommodates high-end VLAN applications and switch includes a plurality of plug-in modules, utilization of flexible industrial and educational computer system that includes desktop environment, WLANs are utilized, WLANs devices such as, Ethernet utilize portions of the radio spectrum, utilization of IRWLAN, accommodating Ethernet ports or radio ports and virtual private networks are proprietary, use of virtual networks for providing adequate security for users, Ethernet devices, WLAN/Ethernet technical details reveal temperature range of 0 to 60 °C, and Ethernet switch that supports high-end features, such as VLAN protocol, RMON, QoS, SNMP and Spanning tree and a storage environment whereby the humidity is 10% to 95% non-condensing and switch operating at one gigabit they fail to teach or suggest with respect to claims 5, 6, 8, 11, 15, 16 and 18, extended vibration of at least 2g and shock vibration of at

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least 4 g, with regard to claim 13, a second switch operationally coupled to a first switch, wherein first switch and second switch are configured to cooperatively operate as one switch.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to whose telephone number is 571-272-3180. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Prenell P. Jones

August 31, 2006


CHI PHAM
SUPERVISORY PATENT EXAMINER 9/1/06